

Volume 1,Issue 3 December 31, 1998

Your Savings Program

What is an investment unit? I thought I owned shares.

Each month when we publish the performance numbers on the WEB, we receive several phone calls asking why the unit values we publish are not the same as the values our participants find in the financial news. This month, let's take a look at investment fund accounting, starting with a review of unit, share and cash accounting. Funds contrib-

Funds contributed by the employees and by the employer are used to purchase securities for each individual investment fund. These securities are purchased by and are held in the name of the fund. The securities are not held individually by the participants in the plan. When a participant asks how many shares he owns, the answer is zero, but each participant has an ownership interest meas-

(Continued on page 2)



Savings Power-A Key to Financial Security

Way to Go Telephone Users

According to information provided by State Street Bank, the Interactive

Voice Response System for our Program is one of the most frequently and best utilized of all the State Street Plans.





ured in units. Just as with a mutual fund, the fund reporting and the participant statement does not attempt to show every separate security held, but rather reports to its investors in the form of a investment unit. It is the value of the investment unit multiplied by the number of investment units held that represents the total value of an individual investors holdings.

Let's see if we can use an example to illustrate unit value accounting. The total market value of each of the securities held by an investment fund each day determines the total value of the investment fund. As each employee contributes money to the fund, the individual's interest in the fund is measured in terms of investment units. Exactly this same accounting is

done by a mutual fund and a mutual fund unit value is often referred to as it's net asset value (NAV.) The Savings Program has investment funds that invest in mutual funds as the primary security. The NAV is an accounting tool for the entire mutual fund, the unit value is the same accounting tool for our Savings Program.

The initial value of an investment unit is established on the first day of the fund. The total market value of the investments held by the fund divided by the unit value on the initial day of the fund determines the initial unit value. That is, market value divided by unit value equals the number of units. For example, if the market value of all securities held was \$120,000,000 and the initial unit value was set as 100.000000, then the unit value would be \$120,000,000 / 100.000000 and the number of units would be 1,200,000, Beginning the first day of the fund's existence, the fund manager is responsible for recording the earnings and

expenses of the fund and for determining the market value of all securities on a daily basis. All earnings received by the fund are immediately reinvested in securities held by the fund and all expenses are paid by disposing of some of the securities and using the proceeds to pay the expenses. After taking into account all new purchases of securities, sales of securities, income received and expenses paid, the fund manager then determines the market value of the securities. The total market value of the securities divided by the number of investment units equals the new unit value. Let's use our example above. On the first day of the fund's existence, we will assume the fund collects \$10,000 in earnings, pays a \$1,000 expense bill and reinvests the net of \$9,000 in new fund securities. The fund had \$120,000,000 of



securities the prior day and has now added \$9,000 to that total. If the market value of the securities remained exactly the same as it had been the day before, the fund would have a market value of \$120,009,000. The total fund market value is \$120,009,000 divided by the units outstanding of 1,200,000 yields a new unit value of (120,009,000 / 1,200,000) of 100.007500. The total market value of the fund has increased and the unit value has increased, from 100.00000 to 100.007500. On day two of the fund's exis-



tence, the fund receives an additional investment from the employees of \$100,000. This new investment needs to be converted to investment units. The conversion to units is done by dividing the dollars contributed by the current unit value. \$100,000 divided by 100.007500 equals 999.925006 units. The fund now has securities and cash totaling \$120,109,000 (\$120,000,000 plus \$9,000 plus \$100,000) and units outstanding of 1,200,999.925006. Does this work? Dividing \$120,109,000 by 1,200,999.925006 yields a unit value of 100.007500. There is only one other event that causes the market value, units and unit values to change. That event is the removal of units by withdrawal or distribution. If an employee chooses to withdraw a sum of money from the investment fund, it becomes necessary for the fund manager to compute how many units have to

be withdrawn to equal the decrease in the assets represented by the withdrawal. It is just the opposite of the contribution. If the withdrawal was \$15,000, then the participant's account would be adjusted downward by (\$15,000 divided by 100.007500) 149.988751 units. This cycle of recording investments, withdrawals, earnings and expenses and then determining the market value of fund assets is repeated each business day.

(Continued from page 2)

The unit value changes each time there are any earnings, losses or changes in market value. The net change in unit value is the best measure of a funds earning performance over time and we use this in our performance statistics. The number of units changes each time there are additional contributions or withdrawals. The accounting system always accounts for events in terms of dollars and units and always reconciles these amounts.

Why would the unit value of an investment fund that invests in a mutual fund not be equal to the NAV of the mutual fund? Several reasons, but primarily because of 1) the initial unit value selected by the investment fund may not have been the NAV of the mutual fund that day, 2) the impact of a dividend distribution by a mutual decreases the NAV but has no change on the investment fund unit value (mutual fund assets decrease, but investment fund assets stay the same) and 3) investment fund expenses incurred reduce the investment fund unit value but have no effect on the mutual fund NAV.

So, with all that complication, why don't we emphasize unit accounting and detail all transactions in units. We use cash accounting as an alternative. Why, because even the simple example above is difficult to understand and transactions measured in units are easy to misinterpret. With "cash" accounting, every event of the plan is measured in market value and is stated in cash. Cash accounting is easy to follow and easy to understand. But how can we measure performance in a cash accounting system? Is is not enough to know we have earnings, we want to know how the funds have done. We ask the system to do it for us. See the WEB page and your quarterly statements. The performance of each fund is measured by changes in unit values and therefore complex accounting by the participant is not necessary. The accounting system of State Street Bank has been evaluated and tested by independent auditors and the published reviews of the system indicates that it works correctly in computing and reporting transactions. Why use a complicated system for reporting when a simple system to understand (everything measured in dollars) works? State Street Bank advises us that the cash accounting method is the most frequently utilized for savings plans. For these reasons, we choose not to disclose the transactions in units.

Note: For those participants wanting Voice Response Unit provides unit WEB page provides unit values on recreated in terms of the units inonly in the form of dollars.



to capture each event in units, the values on a daily basis and the a monthly basis. Any event may be volved even though it is presented

You finish first with a solid personal financial plan.

Keep in Touch, Contact Benefits Administration by Sending an E-mail to ik5@ornl.gov or calling 1-423-574-9564